

Iris D Tommelein

List of Publications by Year in descending order

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Version: 2024-02-01

111
papers

2,354
citations

201385

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113
all docs

113
docs citations

113
times ranked

1223
citing authors

#	ARTICLE	IF	CITATIONS
1	Mistakeproofing Framework and Applications in Civil Engineering Operations and Products. , 2022, , .		0
2	Festschrift honouring Dr. Glenn Ballard. Construction Management and Economics, 2022, 40, 497-506.	1.8	0
3	Evaluating Supply-And Reverse Logistics Alternatives in Building Construction Using Simulation. , 2021, , .		1
4	Methods for Managing Tolerance Compatibility: Windows in Cast-in-Place Concrete. Journal of Construction Engineering and Management - ASCE, 2020, 146, 04019105.	2.0	5
5	Visual Management of Daily Construction Site Space Use. Frontiers in Built Environment, 2020, 6, .	1.2	9
6	Workload leveling based on work space zoning for takt planning. Automation in Construction, 2020, 118, 103223.	4.8	8
7	Design science research in construction management: multi-disciplinary collaboration on the SightPlan system. Construction Management and Economics, 2020, 38, 340-354.	1.8	5
8	Lean construction for affordable housing: a case study in Latin America. Construction Innovation, 2019, 19, 570-593.	1.5	7
9	Discussion of "Toward Error Management in Construction: Moving beyond a Zero Vision" by Peter E.D. Love and Jim Smith. Journal of Construction Engineering and Management - ASCE, 2018, 144, 07017001.	2.0	1
10	Construction Project Complexity as Addressed in Traditional versus Lean Project Management Literature. , 2018, , .		1
11	Lean Construction to Manage Project Structural Complexity: The LPDS-MDM Framework. , 2018, , .		1
12	Using Modularity to Reduce Complexity of Industrialized Building Systems for Mass Customization. Energies, 2017, 10, 1622.	1.6	35
13	Toward Error Management in Construction: Moving beyond a Zero Vision. Journal of Construction Engineering and Management - ASCE, 2016, 142, .	2.0	41
14	Formwork System Selection Using Choosing by Advantages. , 2016, , .		15
15	Choosing by advantages: A case study for selecting an HVAC system for a net zero energy museum. Energy and Buildings, 2016, 111, 26-36.	3.1	48
16	Selecting Globally Sustainable Materials: A Case Study Using Choosing by Advantages. Journal of Construction Engineering and Management - ASCE, 2016, 142, .	2.0	45
17	Supporting the Implementation of Engineering Change Management with the Viable System Model. , 2015, , .		7
18	Using a Systemic Perspective to Support Engineering Change Management. Procedia Computer Science, 2015, 61, 287-292.	1.2	5

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19	Journey toward Lean Construction: Pursuing a Paradigm Shift in the AEC Industry. Journal of Construction Engineering and Management - ASCE, 2015, 141, .	2.0	47
20	Target-Setting Practice for Loans for Commercial Energy-Retrofit Projects. Journal of Management in Engineering - ASCE, 2015, 31, .	2.6	6
21	Comparing AHP and CBA as Decision Methods to Resolve the Choosing Problem in Detailed Design. Journal of Construction Engineering and Management - ASCE, 2015, 141, .	2.0	66
22	Understanding the role of "tasks anticipated" in lookahead planning through simulation. Automation in Construction, 2015, 49, 18-26.	4.8	37
23	Analyzing implementation of lean production control with the Viable System Model. , 2014, , .		2
24	Towards recursive plan-do-check-act cycles for continuous improvement. , 2014, , .		2
25	Development of a Takt-time Plan: A Case Study. , 2014, , .		22
26	Understanding project success through analysis of project management approach. International Journal of Managing Projects in Business, 2014, 7, 638-660.	1.3	71
27	A New Set of Principles for Pursuing the Lean Ideal in Engineer-to-order Manufacturers. Procedia CIRP, 2014, 17, 571-576.	1.0	36
28	Intelligent HVAC systems in hospitals. Intelligent Buildings International, 2013, 5, 101-119.	1.3	21
29	Energy-Related Risk Management in Integrated Project Delivery. Journal of Construction Engineering and Management - ASCE, 2013, 139, .	2.0	18
30	Enhanced viability in organizations: An approach to expanding the requirements of the viable system model. , 2013, , .		1
31	Improving Organizational Design and Diagnosis by Supporting Viable System Model Application with Structural Complexity Management. , 2013, , 133-140.		0
32	Lean hospitals: a new challenge for facility designers. Intelligent Buildings International, 2012, 4, 126-143.	1.3	29
33	Comparing Multi-Criteria Decision-Making Methods to Select Sustainable Alternatives in the AEC Industry. , 2012, , .		7
34	Design of an Infrastructure Project Using a Point-Based Methodology. Journal of Management in Engineering - ASCE, 2012, 28, 291-299.	2.6	5
35	Developing a Target Value Design Protocol for Commercial Energy Retrofits"Part 1. , 2012, , .		4
36	Developing a Target Value Design Protocol for Commercial Energy Retrofits"Part 2. , 2012, , .		2

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37	CREATING DYNAMIC ORGANIZATIONAL MODULARITY IN LEAN CONSTRUCTION DESIGN “ COMBINING MDM AND DSM METHODOLOGY SYSTEMATICALLY. , 2012, , 343-355.		0
38	Construction Engineering“Reinvigorating the Discipline. Journal of Construction Engineering and Management - ASCE, 2011, 137, 740-744.	2.0	29
39	Tolerance and Constructability of Soldier Piles in Slurry Walls. Journal of Performance of Constructed Facilities, 2010, 24, 120-127.	1.0	10
40	Design Structure Matrix Implementation on a Seismic Retrofit. Journal of Management in Engineering - ASCE, 2010, 26, 144-152.	2.6	11
41	Structural Design Iteration: The Application of DSM to Seismic Retrofit. , 2009, , .		0
42	“Lean“Comparison Using Process Charts of Complex Seismic Retrofit Projects. Journal of Construction Engineering and Management - ASCE, 2009, 135, 330-339.	2.0	7
43	Use of A3 Reports to Focus Design and Construction Conversations. , 2009, , .		5
44	Modeling the Effect of an Alternative Review Process: Case Study of a State Permitting Agency. , 2009, , .		0
45	Upstream Problem Solving Under Uncertainty and Ambiguity: Evidence From Airport Expansion Projects. IEEE Transactions on Engineering Management, 2008, 55, 508-522.	2.4	14
46	Problem-Solving Base Building under Uncertainty and Ambiguity: Multiple-Case Study on an Airport Expansion Program. Journal of Construction Engineering and Management - ASCE, 2008, 134, 991-1001.	2.0	3
47	Supply Chain Management for Lean Project Delivery. , 2008, , 6-1-6-22.		8
48	Communication and process simulation of set-based design for concrete reinforcement. , 2007, , .		0
49	External Change in Large Engineering Design Projects: The Role of the Client. IEEE Transactions on Engineering Management, 2006, 53, 426-439.	2.4	23
50	Restructuring the Rebar Supply System. , 2005, , 1.		3
51	Consequences of competitive bidding in project-based production. Journal of Purchasing and Supply Management, 2005, 11, 173-181.	3.1	35
52	Supply Chain Management: Interlinking Multiple Research Streams. , 2005, , 383-410.		0
53	Discussion of “Improving Labor Flow Reliability for Better Productivity as Lean Construction Principle“by H. Randolph Thomas, Michael J. Horman, R. Edward Minchin Jr., and Dong Chen. Journal of Construction Engineering and Management - ASCE, 2005, 131, 615-616.	2.0	9
54	Embodying Product and Process Flexibility to Cope with Challenging Project Deliveries. Journal of Construction Engineering and Management - ASCE, 2005, 131, 439-448.	2.0	36

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55	Application of Tolerance Mapping in AEC Systems. , 2005, , 1.		7
56	Analysis of Variability in Precasting and Installation of Pile Foundations. , 2005, , 1.		3
57	Value Stream Mapping for Make-to-Order Products in a Job Shop Environment. , 2005, , 1.		16
58	Discussion of "Reducing Variability to Improve Performance as a Lean Construction Principle" by H. Randolph Thomas, Michael J. Horman, Ubiraci Espinelli Lemes de Souza, and Ivica Zavranić. Journal of Construction Engineering and Management - ASCE, 2004, 130, 299-300.	2.0	18
59	Work Structuring to Achieve Integrated Product-Process Design. Journal of Construction Engineering and Management - ASCE, 2004, 130, 780-789.	2.0	41
60	Theoretical comparison of alternative delivery systems for projects in unpredictable environments. Construction Management and Economics, 2004, 22, 495-508.	1.8	14
61	Strategic Positioning of Inventory to Match Demand in a Capital Projects Supply Chain. Journal of Construction Engineering and Management - ASCE, 2004, 130, 818-826.	2.0	35
62	Postponing design processes in unpredictable environments. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2004, 15, 139-154.	1.2	9
63	DePlan: a tool for integrated design management. Automation in Construction, 2004, 13, 313-326.	4.8	47
64	Product modeling to support case-based construction planning and scheduling. Automation in Construction, 2004, 13, 341-360.	4.8	31
65	Value stream analysis of a re-engineered construction supply chain. Building Research and Information, 2003, 31, 161-171.	2.0	81
66	Improving Labor Flow Reliability for Better Productivity as Lean Construction Principle. Journal of Construction Engineering and Management - ASCE, 2003, 129, 251-261.	2.0	109
67	Capital Projects Supply Chain Management: SC Tactics of a Supplier Organization. , 2003, , 1.		4
68	Role of Tolerances and Process Capability Data in Product and Process Design Integration. , 2003, , 1.		16
69	Acknowledging Variability and Uncertainty in Product and Process Development. , 2003, , .		2
70	Leveraging specialty-contractor knowledge in design-build organizations. Engineering, Construction and Architectural Management, 2001, 8, 355-367.	1.8	13
71	Improvement Algorithm for Limited Space Scheduling. Journal of Construction Engineering and Management - ASCE, 2001, 127, 116-124.	2.0	50
72	Impact of Variability and Uncertainty on Product and Process Development. , 2000, , 969.		4

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73	Interactive Coordination of Distributed Work Plans. , 2000, , 11.		5
74	Lean Product-Process Development Process to Support Contractor Involvement During Design. , 2000, , 1086.		9
75	Travel-time simulation to locate and staff temporary facilities under changing construction demand. , 1999, , .		10
76	Parade Game: Impact of Work Flow Variability on Trade Performance. Journal of Construction Engineering and Management - ASCE, 1999, 125, 304-310.	2.0	166
77	WorkPlan: Constraint-Based Database for Work Package Scheduling. Journal of Construction Engineering and Management - ASCE, 1999, 125, 151-160.	2.0	73
78	Dynamic Layout Planning Using a Hybrid Incremental Solution Method. Journal of Construction Engineering and Management - ASCE, 1999, 125, 400-408.	2.0	125
79	Pull-Driven Scheduling for Pipe-Spool Installation: Simulation of Lean Construction Technique. Journal of Construction Engineering and Management - ASCE, 1998, 124, 279-288.	2.0	208
80	Boiler Erection Scheduling Using Product Models and Case-Based Reasoning. Journal of Construction Engineering and Management - ASCE, 1997, 123, 338-347.	2.0	32
81	DIDS: rapidly prototyping configuration design systems. Journal of Intelligent Manufacturing, 1994, 5, 33-45.	4.4	1
82	Assembly of Simulation Networks Using Designs, Plans, and Methods. Journal of Construction Engineering and Management - ASCE, 1994, 120, 796-815.	2.0	22
83	An analysis of several configuration design systems. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 1993, 7, 1-17.	0.7	11
84	Interactive Dynamic Layout Planning. Journal of Construction Engineering and Management - ASCE, 1993, 119, 266-287.	2.0	102
85	Construction Project Planning Process Model for Smallâ€Medium Builders. Journal of Construction Engineering and Management - ASCE, 1992, 118, 651-666.	2.0	10
86	SightPlan Model for Site Layout. Journal of Construction Engineering and Management - ASCE, 1992, 118, 749-766.	2.0	72
87	Siteâ€Layout Modeling: How Can Artificial Intelligence Help?. Journal of Construction Engineering and Management - ASCE, 1992, 118, 594-611.	2.0	49
88	Altering the SightPlan knowledge-based systems. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 1992, 6, 19-37.	0.7	9
89	Activity-Level Space Scheduling. , 1992, , .		4
90	SightPlan Experiments: Alternate Strategies for Site Layout Design. Journal of Computing in Civil Engineering, 1991, 5, 42-63.	2.5	65

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91	Sightplan: An Artificial Intelligence Tool to Assist Construction Managers with Site Layout. , 1989, , .		3
92	Comparison of simulation modeling techniques that use preemption to capture design uncertainty. , 0, , .		3
93	Modeling design development in unpredictable environments. , 0, , .		4
94	Contributors to lead time in construction supply chains: case of pipe supports used in power plants. , 0, , .		5
95	Lead time reduction via pre-positioning of inventory in an industrial construction supply chain. , 0, , .		3
96	Impact of multitasking and merge bias on procurement of complex equipment. , 0, , .		2
97	Slack in Construction - Part 2: Practical Applications. , 0, , .		1
98	Buffer Types and Methods of Deployment in Construction. , 0, , .		0
99	Slack in Construction - Part 1: Core Concepts. , 0, , .		3
100	Variety in Variability in Heavy Civil Engineering. , 0, , .		1
101	Integration of Lean and Information Technology to Enable a Customization Strategy in Affordable Housing. , 0, , .		6
102	Visualizing Daily On-site Space Use. , 0, , .		4
103	Collaborative Takt Time Planning of Non-Repetitive Work. , 0, , .		18
104	Lean, Psychological Safety, and Behavior-Based Quality: A Focus on People and Value Delivery. , 0, , .		3
105	Visual Tool for Workload Leveling Using the Work Density Method for Takt Planning. , 0, , .		4
106	Taking the Parade of Trades: Use of Capacity Buffers to Gain Work Flow Reliability. , 0, , .		7
107	Process-Based Cost Modeling Framework and Case Study. , 0, , .		1
108	Managing the "Receding Edge" , 0, , .		1

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109	Towards Facility Management Participation in Design: A UCSF Case Study. , 0, , .		2
110	An Active Caring Approach Through Psychological Safety in Construction Projects. , 0, , .		1
111	Principles of Mistakeproofing and Inventive Problem Solving (TRIZ). , 0, , .		4